

Thomas, et al. (9692-000029) Seq. Listing.ST25  
SEQUENCE LISTING

<110> Applera Corporation  
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Campbell, Michael  
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Diemer, Karen  
Guo, Nan  
Ladunga, Istvan  
Lazareva, Betty  
Muruganujan, Anushya  
Rabkin, Steven  
Vandergriff, Jody  
Doremieux, Olivier

<120> Browseable Database For Biological Use

<130> 9692-000029

<160> 63

<170> PatentIn version 3.2

<210> 1

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Leu His Tyr Val Thr Thr Trp Phe Leu Leu Asp Val Ile Ala Ala Leu  
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Leu His Tyr Val Thr Thr Trp Phe Leu Leu Asp Val Ile Ala Ala Leu  
Page 1

Pro Phe Asp Leu Leu His Ala Lys Val Asn Tyr Val Gly Ala  
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Thomas, et al. (9692-000029) Seq. Listing.ST25

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20 25 30

Thr His Tyr Val Thr Thr Trp Phe Ile Ile Asp Leu Ile Ala Ala Leu  
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Thomas, et al. (9692-000029) Seq. Listing.ST25

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Leu His Tyr Leu Ala Thr Trp Phe Phe Ile Asp Leu Ile Ala Ala Leu  
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Ile Met Asn Tyr Leu Lys Ser Trp Phe Ile Ile Asp Leu Leu Ser Cys  
35 40 45

Leu Pro Asp Val Phe Asn Ala Phe Asp Arg Asp Glu Asp Gly Ile Gly  
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Thomas, et al. (9692-000029) Seq. Listing.ST25

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Ile Met Asn Tyr Leu Lys Ser Trp Phe Ile Ile Asp Leu Leu Ser Cys  
35 40 45

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Ile Gln Asn Tyr Phe Lys Ser Trp Phe Leu Ile Asp Leu Leu Ser Cys  
35 40 45

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Ser Leu Phe  
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Ile Gln Asn Tyr Phe Lys Ser Trp Phe Leu Ile Asp Leu Leu Ser Cys  
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Ile Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys  
35 40 45

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Ser Leu Phe  
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Page 6

Thomas, et al. (9692-000029) Seq. Listing.ST25  
 20 25 30

Ile Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys  
 35 40 45

Leu Pro Asp Ile Ile Asn Ala Phe Glu Asn Val Asp Glu Gly Ile Ser  
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Ser Leu Phe  
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Ile Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys  
 35 40 45

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Phe Met Gly Asp Pro Gly Lys Ile Gly Phe Ala Asp Gln Ile Pro Pro  
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Ile Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys  
 35 40 45

Leu Pro Asp Val Ile Asn Ala Phe Glu Asn Val Asp Glu Val Ser Ala  
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Thomas, et al. (9692-000029) Seq. Listing.ST25

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20 25 30

Ile Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys  
35 40 45

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20 25 30

Ile Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys  
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Ser Leu Phe  
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Ile Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys  
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Ser Leu Phe  
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Val Thr Gln Glu Thr Gln Ala Arg Leu Ser Lys Glu Leu Gln Ala Ala  
35 40 45

Gln Ala Arg Val Gly Ala Asp Met Glu Asp Val Arg Asn Arg Leu Val  
50 55 60

Leu Tyr Arg Ser Glu Val His Asn Met Leu Gly Gly Thr Thr Glu Glu  
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Thomas, et al. (9692-000029) Seq. Listing.ST25

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Val Thr Gln Glu Thr Gln Ala Arg Leu Ser Lys Glu Leu Gln Ala Ala  
35 40 45

Gln Ala Arg Val Gly Ala Asp Met Glu Asp Val Arg Asn Arg Leu Val  
50 55 60

Leu Tyr Arg Ser Glu Val His Asn Met Leu Gly Gly Thr Thr Glu Glu  
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Leu Arg Ser Arg Leu Ala Ser His Leu Arg Asn Val Arg Lys Arg Leu  
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Val

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20 25 30

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35 40 45

Ala Arg Leu Gly Ser Asp Met Glu Asp Leu Arg Asn Arg Leu Ala Gln  
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Tyr Arg Ser Glu Val Gln Ala Met Leu Gly Gly Ser Thr Glu Glu Leu  
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Arg Ala Arg Met Ala Ser His Leu Arg Lys Leu Arg Lys Arg Leu Leu  
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Thomas, et al. (9692-000029) Seq. Listing.ST25

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35 40 45

Ala Arg Leu Gly Ser Asp Met Glu Asp Leu Cys Gly Arg Leu Ala Gln  
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Tyr Arg Ser Glu Val Gln Ala Met Leu Gly Gly Ser Thr Glu Glu Leu  
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Ala Gln Glu Thr Gln Ala Arg Val Ser Lys Glu Leu Gln Ala Ala Gln  
35 40 45

Ala Arg Leu Gly Ser Asp Met Glu Asp Leu Arg Asn Arg Leu Ala Gln  
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Tyr Arg Ser Glu Val Gln Ala Met Leu Gly Gly Ser Thr Glu Glu Leu  
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Thomas, et al. (9692-000029) Seq. Listing.ST25

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35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Arg Thr Arg Leu Ala Gln  
50 55 60

Tyr Arg Ser Glu Val His Thr Met Leu Gly Gly Ser Thr Glu Glu Leu  
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20 25 30

Ala Glu Glu Thr Arg Ala Arg Leu Ser Lys Glu Leu Gln Ala Ala Gln  
35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Arg Ser Arg Leu Ala Gln  
50 55 60

Tyr Arg Ser Glu Val Gln Ala Met Leu Gly Gly Ser Thr Asp Glu Leu  
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35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Arg Ser Arg Leu Val Gln  
50 55 60

Tyr Arg Ser Glu Val Gln Ala Met Leu Gly Gly Ser Thr Glu Glu Leu  
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Arg Ala Arg Leu Ala Ser His Leu Arg Lys Leu Arg Lys Arg Leu Leu  
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35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Arg Ser Arg Leu Val Gln  
50 55 60

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Thomas, et al. (9692-000029) Seq. Listing.ST25

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35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Arg Ser Arg Leu Val Gln  
50 55 60

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35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Arg Gly Arg Leu Val Gln  
50 55 60

Tyr Arg Gly Glu Val Gln Ala Met Leu Gly Gly Ser Thr Glu Glu Leu  
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Arg Ala Arg Leu Ala Ser His Leu Arg Lys Leu Arg Lys Arg Leu Leu  
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Thomas, et al. (9692-000029) Seq. Listing.ST25

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35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Arg Gly Arg Leu Val Gln  
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Tyr Arg Gly Glu Val Gln Ala Met Leu Gly Gly Ser Thr Glu Glu Leu  
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35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Cys Gly Arg Leu Val Gln  
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Thomas, et al. (9692-000029) Seq. Listing.ST25

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35 40 45

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50 55 60

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35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Arg Gly Arg Leu Val Gln  
50 55 60

Tyr Arg Gly Glu Val Gln Ala Met Leu Gly Gly Ser Thr Glu Glu Leu  
65 70 75 80

Arg Ala Arg Leu Ala Ser His Leu Arg Lys Leu Arg Lys Arg Leu Leu  
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Thomas, et al. (9692-000029) Seq. Listing.ST25

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20 25 30

Ala Glu Glu Thr Arg Ala Arg Leu Ser Lys Glu Leu Gln Ala Ala Gln  
35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Arg Gly Arg Leu Val Gln  
50 55 60

Tyr Arg Gly Glu Val Gln Ala Met Leu Gly Gly Ser Thr Glu Glu Leu  
65 70 75 80

Arg Ala Arg Leu Ala Ser His Leu Arg Lys Leu Arg Lys Arg Leu Leu  
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20 25 30

Ala Glu Glu Thr Arg Ala Arg Leu Ser Lys Glu Leu Gln Ala Ala Gln  
35 40 45

Ala Arg Leu Gly Ala Asp Met Glu Asp Val Arg Gly Arg Leu Ala Gln  
50 55 60

Tyr Arg Gly Glu Val Gln Ala Met Leu Gly Gly Ser Thr Glu Glu Leu  
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Arg Ala Arg Leu Ala Ser His Leu Arg Lys Leu Arg Lys Arg Leu Leu  
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Thr Asp Val Thr Gln Gln Leu Asn Thr Leu Phe Gln Asp Lys Leu Gly  
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1 Thomas, et al. (9692-000029) Seq. Listing.ST25  
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Asn Ile Asn Thr Tyr Ala Asp Asp Leu Gln Asn Lys Leu Val Pro Phe  
20 25 30

Ala Val Gln Leu Ser Gly His Leu Thr Lys Glu Thr Glu Arg Val Arg  
35 40 45

Glu Glu Ile Gln Lys Glu Leu Glu Asp Leu Arg Ala Asn Met Met Pro  
50 55 60

His Ala Asn Lys Val Ser Gly Met Phe Gly Asp Asn Val Gln Lys Leu  
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20 25 30

Ala Val Gln Leu Ser Gly His Leu Thr Lys Glu Thr Glu Arg Val Arg  
35 40 45

Glu Glu Ile Gln Lys Glu Leu Glu Asp Leu Arg Ala Asn Met Met Pro  
50 55 60

His Ala Asn Lys Val Ser Gln Met Phe Gly Asp Asn Val Gln Lys Leu  
65 70 75 80

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Thomas, et al. (9692-000029) Seq. Listing.ST25

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35 40 45  
Glu Glu Ile Lys Lys Glu Leu Glu Asp Leu Arg Asp Arg Met Met Pro  
50 55 60  
His Ala Asn Lys Val Thr Gln Thr Phe Gly Glu Asn Met Gln Lys Leu  
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Thr Asp Val Thr Gln Gln Leu Ser Thr Leu Phe Gln Asp Lys Leu Gly  
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Asp Ala Ser Thr Tyr Ala Asp Gly Val His Asn Lys Leu Val Pro Phe  
20 25 30  
Val Val Gln Leu Ser Gly His Leu Ala Lys Glu Thr Glu Arg Val Lys  
35 40 45  
Glu Glu Ile Lys Lys Glu Leu Glu Asp Leu Arg Asp Arg Met Met Pro  
50 55 60  
His Ala Asn Lys Val Thr Gln Thr Phe Gly Glu Asn Met Gln Lys Leu  
65 70 75 80  
Gln Glu His Leu Lys Pro Tyr Ala Val Asp Leu Gln Asp Gln Ile Asn  
85 90 95

Thomas, et al. (9692-000029) Seq. Listing.ST25

Thr Gln Thr Gln Glu Met Lys Leu Gln Leu Thr  
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Asp Ala Ser Thr Tyr Ala Asp Gly Val His Asn Lys Leu Val Pro Phe  
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Val Val Gln Leu Ser Gly His Leu Ala Gln Glu Thr Glu Arg Val Lys  
35 40 45

Glu Glu Ile Lys Lys Glu Leu Glu Asp Gln Arg Asp Arg Met Met Pro  
50 55 60

His Ala Asn Lys Val Thr Gln Thr Phe Gly Glu Asn Met Gln Lys Leu  
65 70 75 80

Gln Glu His Leu Lys Pro Tyr Ala Val Asp Leu Gln Asp Gln Ile Asn  
85 90 95

Thr Gln Thr Gln Glu Met Lys Leu Gln Leu Thr  
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Asp Ala Ser Thr Tyr Ala Asp Gly Val His Asn Lys Leu Val Pro Phe  
20 25 30

Val Val Gln Leu Ser Gly His Leu Ala Lys Glu Thr Glu Arg Val Lys  
35 40 45

Glu Glu Ile Lys Lys Glu Leu Glu Asp Leu Arg Asp Arg Met Met Pro  
50 55 60

Thomas, et al. (9692-000029) Seq. Listing.ST25

His Ala Asn Lys Val Thr Gln Thr Phe Gly Glu Asn Met Gln Lys Leu  
65 70 75 80

Gln Glu His Leu Lys Pro Tyr Ala Val Asp Leu Gln Asp Gln Ile Asn  
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Thr Gln Thr Gln Glu Met Lys Leu Gln Leu Thr  
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Asp Ala Ser Thr Tyr Ala Asp Gly Val His Asn Lys Leu Val Pro Phe  
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Val Val Gln Leu Ser Gly His Leu Ala Lys Glu Thr Glu Arg Val Lys  
35 40 45

Glu Glu Ile Lys Lys Glu Leu Glu Asp Leu Arg Asp Arg Met Met Pro  
50 55 60

His Ala Asn Lys Val Thr Gln Thr Phe Gly Glu Asn Met Gln Lys Leu  
65 70 75 80

Gln Glu His Leu Lys Pro Tyr Ala Val Asp Leu Gln Asp Gln Ile Asn  
85 90 95

Thr Gln Thr Gln Glu Met Lys Leu Gln Leu Thr  
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Ala Glu Ile Thr Lys Gln Leu Asn Thr Leu Leu Gln Ser Asn Leu Gln  
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Ser Ala Asn Ser Tyr Ala Glu Glu Leu Gln Arg Arg Leu Val Pro Phe  
20 25 30

Thomas, et al. (9692-000029) Seq. Listing.ST25

Ala Thr Glu Leu Gln Ala Gln Leu Val Gln Asp Ser Gln Arg Leu Lys  
35 40 45

Lys Gln Ile Gln Gln Glu Leu Ala Glu Leu Gln Ala Lys Leu Ala Pro  
50 55 60

Tyr Ala Asp Glu Val His Gln Gln Ile Gly Thr Asn Ile Arg Glu Leu  
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Gln Ala Lys Leu Ser  
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<400> 46

Ser Glu Leu Thr Gln Gln Leu Asn Thr Leu Phe Gln Asp Lys Leu Gly  
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Glu Val Asn Thr Tyr Thr Glu Asp Leu Gln Lys Lys Leu Val Pro Phe  
20 25 30

Ala Thr Glu Leu His Glu Arg Leu Thr Lys Asp Ser Glu Lys Leu Lys  
35 40 45

Glu Glu Ile Arg Arg Glu Leu Glu Glu Leu Arg Ala Arg Leu Leu Pro  
50 55 60

His Ala Thr Glu Val Ser Gln Lys Ile Gly Asp Asn Val Arg Glu Leu  
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Gln Gln Arg Leu Gly  
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<400> 47

Ser Glu Leu Thr Gln Gln Leu Asn Ala Leu Phe Gln Asp Lys Leu Gly  
1 5 10 15

Glu Val Asn Thr Tyr Ala Gly Asp Leu Gln Lys Lys Leu Val Pro Phe  
20 25 30

Ala Thr Glu Leu His Glu Arg Leu Ala Lys Asp Ser Lys Lys Leu Lys  
Page 22

35 Thomas, et al. (9692-000029) Seq. Listing.ST25  
40 45

Glu Glu Ile Arg Lys Glu Leu Glu Glu Val Arg Ala Arg Leu Leu Pro  
50 55 60

His Ala Asn Glu Val Ser Gln Lys Ile Gly Glu Asn Val Arg Glu Leu  
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Gln Gln Arg Leu Glu  
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Ser Glu Leu Thr Gln Gln Leu Asn Ala Leu Phe Gln Asp Lys Leu Gly  
1 5 10 15

Glu Val Asn Thr Tyr Ala Gly Asp Leu Gln Lys Lys Leu Val Pro Phe  
20 25 30

Ala Thr Glu Leu His Glu Arg Leu Ala Lys Asp Ser Glu Lys Leu Lys  
35 40 45

Glu Glu Ile Arg Lys Glu Leu Glu Glu Val Arg Ala Arg Leu Leu Pro  
50 55 60

His Ala Asn Glu Val Ser Gln Lys Ile Gly Glu Asn Val Arg Glu Leu  
65 70 75 80

Gln Gln Arg Leu Glu  
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<400> 49

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1 5 10 15

Glu Val Asn Thr Tyr Ala Gly Asp Leu Gln Lys Lys Leu Val Pro Phe  
20 25 30

Ala Thr Glu Leu His Glu Arg Leu Ala Lys Asp Ser Glu Lys Leu Lys  
35 40 45

Glu Glu Ile Gly Lys Glu Leu Glu Glu Leu Arg Ala Arg Leu Leu Pro  
 50 55 60

His Ala Asn Glu Val Ser Gln Lys Ile Gly Asp Asn Leu Arg Glu Leu  
 65 70 75 80

Gln Gln Arg Leu Glu  
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1 5

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Arg Gly Pro Leu Phe Val Trp Lys Phe  
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